

# Interactive computer program helps patients talk with their physician about depression

November 5 2013

---

Patients who used an interactive computer program about depression while waiting to see their primary-care doctor were nearly twice as likely to ask about the condition and significantly more likely to receive a recommendation for antidepressant drugs or a mental-health referral from their physician, according to a new study by researchers at UC Davis.

The study, published online today in the *Journal of the American Medical Association*, was conducted to evaluate the effectiveness of a waiting-room intervention that encourages primary-care patients to discuss depression [symptoms](#) and care with their physician. While patients who received treatment or a referral for depression did not report improved [mental health](#) 12 weeks later, the study did show that providing information to patients about depression is an effective way to start the conversation in a primary-care setting about mental health.

"We have developed an easy-to-use tool to help people with depression identify the symptoms, feel more comfortable discussing it with a primary-care provider and accept treatment if it is needed," said Anthony Jerant, professor of family and community medicine at UC Davis and senior author of the study. "This brief and relatively inexpensive intervention could be easily and widely implemented in a variety of health-care settings."

Depression is an underrecognized and undertreated condition that can easily be overlooked during a typical primary-care visit. While

calculating the number of people suffering from untreated depression is difficult, the Centers for Disease Control estimates that nationally 1-in-10 adults has reported [symptoms of depression](#). The National Institute of Mental Health has said that major depressive disorders affect approximately 14.8 million American adults, or about 6.7 percent of the U.S. population age 18 and older in a given year. When left untreated, depression poses high costs to society, jeopardizing relationships and employment, decreasing quality of life, prompting alcohol and drug abuse and, in some cases, leading to the higher risk of suicide.

## **Three waiting-room interventions tested**

The new study involved nearly 900 patients and 135 primary-care clinicians at seven Northern California health-care sites. Prior to their medical appointments, patients were screened for depression. All patients were then randomized to view one of three interventions:

- A video – similar to a public-service announcement – focused on recognizing depression and talking with doctors about symptoms
- An interactive multimedia [computer program](#) that provided patients with instant feedback and information tailored to different levels of depressive symptoms and treatment preferences
- A non-depression-related video on healthy sleep

The clinicians did not know which intervention their patients viewed. Immediately after the patients' appointments, the researchers determined if the patients discussed depression with their clinicians and whether they left with prescriptions for medications to treat depression and if they received a referral for mental-health services.

## **Help for the most depressed**

The results showed that patients with baseline depression who either watched the informational video or used the computer program were nearly twice as likely as control subjects to request information about depression during their appointment. Those who used the interactive computer program were significantly more likely to receive a prescription or referral for depression (26 percent) than were those who viewed either the depression video (17.5 percent) or the video on sleep (16.3 percent). The computer program had the greatest impact on patients who were most depressed, according to the baseline screening.

The investigators also studied the effects of the interventions on people who were not likely to be depressed according to the baseline screening. Among these patients, rates of prescribing and referral were low (about 5 percent) and did not differ by intervention group. According to Richard Kravitz, UC Davis professor of internal medicine and lead author of the study, it is important for public-health interventions to avoid inadvertently expanding unnecessary treatments that can do more harm than good and waste health-care resources.

"We were concerned that the interventions could lead to treatment for depression for those who do not actually have it," said Kravitz. "Our interactive computer program, however, increased help for those who needed it the most without increasing treatment for those who didn't."

According to Jerant, this study is the largest to compare "targeted" versus "tailored" interventions for stimulating people with depression to seek and accept treatment. Targeted interventions, such as the informational video used in the study, use terms and images most likely to resonate with the target audience, based on specific demographic factors. Four different versions were used in this study, targeted toward gender and income levels. The video took about three minutes to watch.

Tailored interventions, such as the study's interactive computer program,

integrate patient-specific answers to deliver information and guidance. The program used in the study, developed by the study investigators, prompted users to answer questions about symptoms of depression, informed users as to whether or not they were likely to be depressed, and provided guidance depending on the users' specific needs and interests. Patients assigned to the computer program spent about two to 15 minutes on it, with a median of five minutes.

Kravitz speculated that the informational video did not work as well because, like a television commercial advertising a medication, it may require multiple repetitions to be effective. In contrast, the [interactive computer program](#) quickly provided a high level of personalization, which may account for its higher degree of effectiveness with a single use.

The UC Davis investigators intend to further refine and study the interactive computer model to identify [patients](#) who need to receive more extensive [treatment](#) for their [depression](#).

Provided by UC Davis

Citation: Interactive computer program helps patients talk with their physician about depression (2013, November 5) retrieved 20 November 2023 from <https://medicalxpress.com/news/2013-11-interactive-patients-physician-depression.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--